

Ship Sept 20

Dart Aerospace Ltd.

Date: Tuesday, 15/08/2006 7:10:25 AM
User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : STEP INSTALLATION LH (FOLDING)
Job Number : 28150	
Estimate Number : 11404	
P.O. Number : N/A	Part Number : D412630013
This Issue : 15/08/2006 S.O. No. : N/A	Drawing Number : D2801 REV A1
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : LARGE FAB ASSY	Drawing Revision : A1
Previous Run : 25704	Material : N/A
Written By :	Due Date : 20/09/2006 Qty: 7 Um: Each
Checked & Approved By :	
Comment : Est Rev:E 04.05.17 Reformat; Removed AN3-16A KJ/RF	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels as per PPP D412-630-013 CHG004

KS 06.09.06

2.0	D2622120C	Extrusion
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 7.0000 Each(s)

Qty	Part #	Description	Batch:
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1	D2622-120C	Extrusion	B27077
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Check Material for any Dents or Defects

KS 06.08.15

3.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
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Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622 extrusion to 86.15" long as per Dwg D2801

2-Deburr and bevel ends for welding

KS 06.08.15

4.0	QC5	INSPECT WORK TO CURRENT STEP
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Comment: INSPECT WORK TO CURRENT STEP

KS 06.08.15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description:

5.0

D2734

206 Step Endplate



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2734

End Cap

327281

P.E. 06.08.23

7

6.0

D28021

Arm



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2802-1

Arm

328156

P.E. 06.08.23

7

7.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Weld arms and end caps as per Dwg D2801 & QSI 004. Inspect for foreign objects as per QSI 024.

A/R Aluminum Rod M100660

P.E. 06.08.23

7

2-Grind end cap welds flush as per Dwg D2801

P.E. 06.08.23

7

8.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

06-08-23 (7)

06/08/23 (7)

9.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

500 06.07.31

7

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

a.m 06-07-14

(7)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
06-09-2	9.b	Debur and bevel aft end for welding	LE	06-09-02	7		
06-09-5	9.c	Weld aft. end cap & grind flush	LE	06-09-02	7		
06-09-5	9.d	B.C. 5/9 weld inspection	06-09-05 (7)	06/04/06	7		
06-09-5	9.e	chemical conversion as per QST 005 4.1					

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description :

11.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D2801 and QSI 005 4.4

Batch: 101 667

FC 06 09 18 (7)

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

PW 6/9/18 (7)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Assembly Kit

14.0

D2012107

Clevis



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2012-107

Clevis B 27522

15.0

D2022101

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2022-101 Spacer

B 25815

16.0

D2652

Bushing



Comment: Qty.: 4.0000 Each(s)/Unit Total: 28.0000 Each(s)

Pick:

Qty Part Number

Description Batch

4 D2652

Bushing B 27145

17.0

D2803043

STA 84 Bracket Ass'y LH



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2803-043

Bracket Assembly B 28158

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Job Number: 28150

Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description:

18.0

D2804043

STA 155 Bracket Ass'y LH



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2804-043 Bracket Assembly B28160

19.0

D2807

Support Prop



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2807 Gas Spring B27151

20.0

D2808

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2808 Bushing B27564 (9) (5) B28600

21.0

D28101

Strut



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2810-1 Strut B25712

22.0

D2813

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 D2813 Washer B25923

23.0

AN320A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN3-20A Bolt M15432

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description :

24.0

AN3108

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN310-8

Nut

M101884

25

44.75

25.0

AN410A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 7.0000 Each(s)

Pick:

QPick:

Qty Part Number

Description Batch

1 AN4-10A

Bolt

M17073



26.0

AN816

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total : 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN8-16

Bolt

M102138 X

27.0

AN960JD10

Washer



Comment: Qty.: 5.0000 Each(s)/Unit Total : 35.0000 Each(s)

Pick:

Qty Part Number

Description Batch

5 AN960JD10

Washer

M100743

28.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960JD416

Washer

M19185



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Drawing Name: STEP INSTALLATION LH (FOLDING)

Job Number: 28150

Part Number: D412630013

Job Number:



Seq. #:	Machine Or Operation:	Description :
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29.0	AN960JD816	1/2" washer, Alum
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Comment: Qty.: 4.0000 Each(s)/Unit Total: 28.0000 Each(s)

Pick:

Qty Part Number Description Batch

4 AN960JD816 Washer M6956

30.0	MS21042L3	Nut
------	-----------	-----



Comment: Qty.: 5.0000 Each(s)/Unit Total: 35.0000 Each(s)

Pick:

Qty Part Number Description Batch

5 MS21042L3 Nut (or -3) M101390

31.0	MS21042L4	Nut
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 MS21042L4 Nut (or -4) M19085

32.0	MS24665285	Cotter Pins
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Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 MS24665-285 Cotter Pin M2421

33.0	MS24693S280	Screw
------	-------------	-------



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick:

Qty Part Number Description Batch

2 MS24693-S280 Screw M8649

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 28150

Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

AN316A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN3-16A

Bolt

7101884

35.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble as per Dwg D412-630

MP: 06/09/21

36.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DR 06/09/21

37.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

38.0

D2012107

Clevis



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

1 D2012-107

Clevis

B27522

39.0

D2022101

Spacer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

2 D2022-101

Spacers

B25815

40.0

D28061

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick: Packing Kit

Qty Part Number

Description Batch

2 D2806-1

Bushing

B28162

DR 06/09/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

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Drawing Name: STEP INSTALLATION LH (FOLDING)

Job Number: 28150

Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description :

41.0

D28063

Bushing



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 D2806-3

Bushing

B28163x1, B28210x13

42.0

AN46A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 AN4-6A

Bolt

M101418 -

43.0

AN410A

Bolt



Comment: Qty.: 1.0000 Each(s)/Unit Total: 7.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

1 AN4-10A

Bolt

M17073 ✓

44.0

AN415A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN4-15A

Bolt

M102039 ✓

45.0

AN515A

Bolt



Comment: Qty.: 2.0000 Each(s)/Unit Total: 14.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 AN5-15A

Bolt

M19278 ✓

RB 06/09/21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Job Number: 28150

Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description :

46.0

AN960JD416

Washer



Comment: Qty.: 6.0000 Each(s)/Unit Total : 42.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

6 AN960JD416 Washer M19185

47.0

AN960JD516

Washer



Comment: Qty.: 4.0000 Each(s)/Unit Total : 28.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 AN960JD516 Washer M101369

48.0

MS21042L4

Nut



Comment: Qty.: 4.0000 Each(s)/Unit Total : 28.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

4 MS21042L4 Nut (or -4) M19085

49.0

MS21042L5

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 14.0000 Each(s)

Pick: Packing Kit

Qty Part Number Description Batch

2 MS21042L5 Nut (or -5) M101648

2506/09/21

50.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

2506/09/21 (7)

51.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and pack for shipping as per PPP D412-630-013

Location:

PPP Rev: B

2506/09/21 (7)

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: AD Date: 06/09/22
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Part Number: D412630013

Job Number:



Seq. #:

Machine Or Operation:

Description :

52.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

⑦
D 06/09/22

Job Completion



U 2009.22

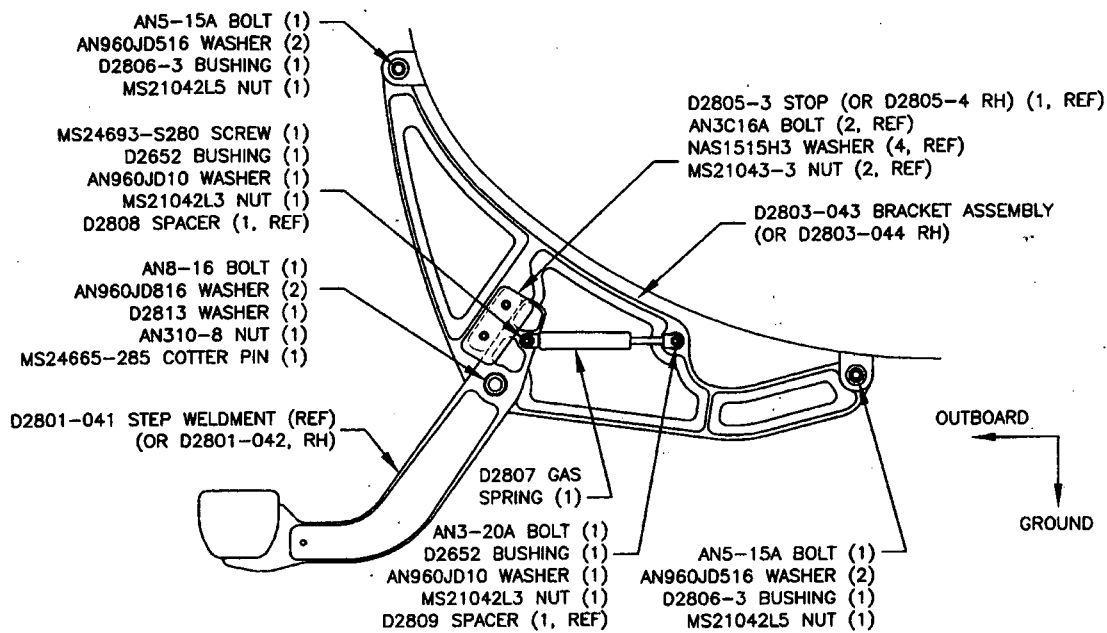
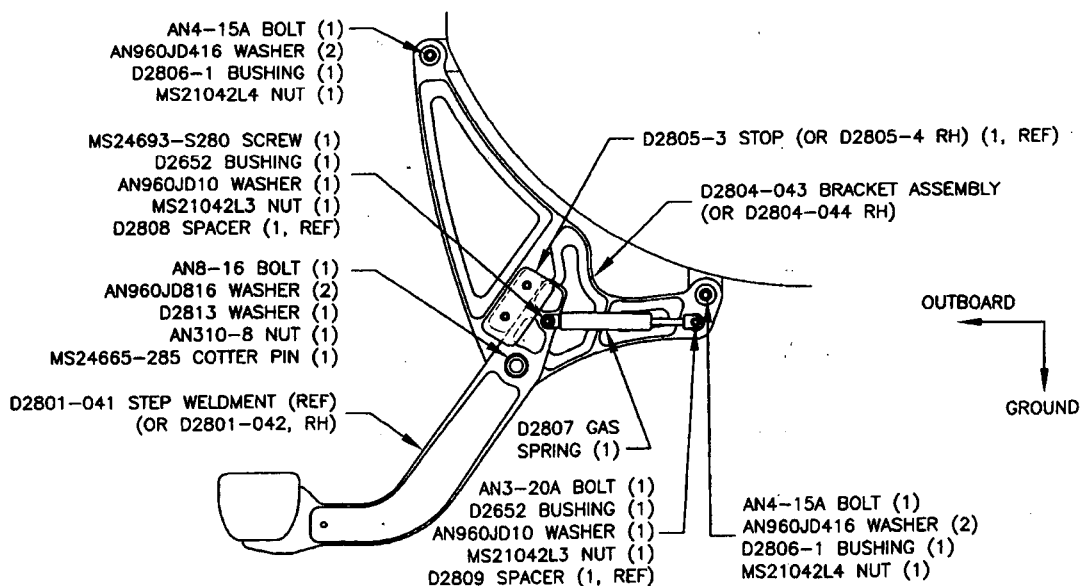
W/O:		WORK ORDER CHANGES					
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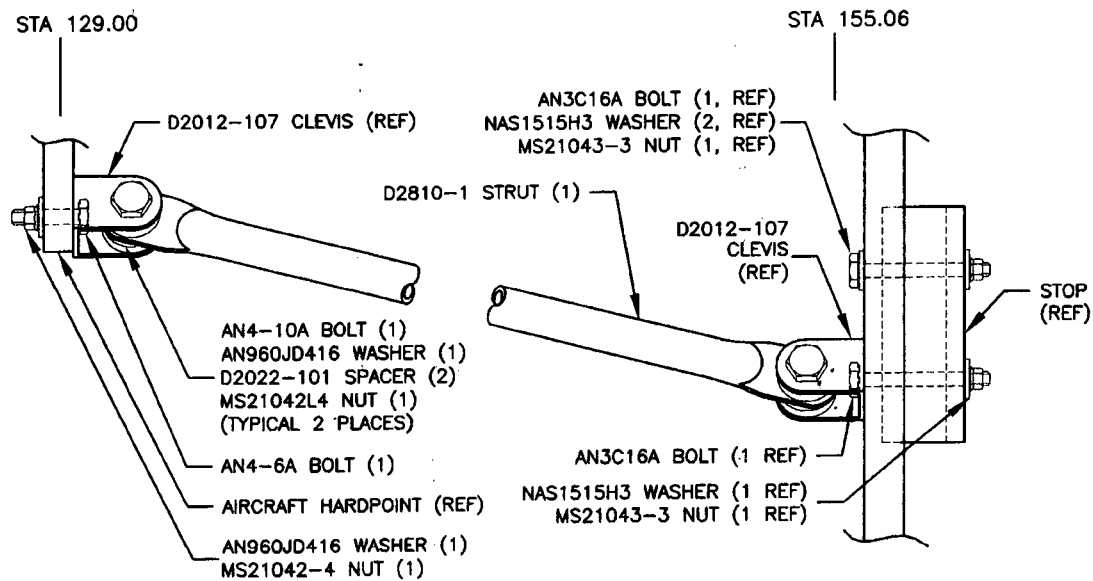
D412-630-013/-014 Heli-Access-Step™ Installation**FIGURE 8 – STA 84.29 for D412-630-013/-014 Heli-Access-Step™ Installation**
(View rotated 90° CW)**FIGURE 9 – STA 155.06 for D412-630-013/-014 Heli-Access-Step™ Installation**
(View rotated 90° CW)

REFERENCE

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Revision: J
Date: 05.12.08

**FIGURE 10 – Strut Detail for D412-630-013/-014 Heli-Access-Step™ Installation
(NOT TO SCALE)**



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